

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

MONTHLY LETTER OF THE BUREAU OF ENTOMOLOGY
UNITED STATES DEPARTMENT OF AGRICULTURELIBRARY
RECEIVED
JUL 10 1922
U. S. Department of Agriculture

Number 98

June, 1922.

DOCTORATE CONFERRED UPON MR. E. A. SCHWARZ

Members of the Bureau of Entomology will be pleased to learn that the honorary degree of Doctor of Science was conferred upon Mr. E. A. Schwarz by the University of Maryland at its commencement exercises, June 10. Dr. Schwarz's scientific work in the United States was begun in the Museum of Comparative Zoology, Cambridge, Mass., in 1873 and 1874, in the days of Agassiz. In 1875 and 1876, he studied Coleoptera for the Detroit, Mich., Scientific Association, and in 1878 was employed by Dr. John L. Le Conte to investigate the beetles of Colorado. While in Colorado on this errand he was offered a position in the Department of Agriculture by Dr. C. V. Riley. He accepted the position and has been connected with the Division (and Bureau) of Entomology continuously ever since. Dr. Schwarz is Honorary Custodian of the Coleoptera in the Division of Insects, U. S. National Museum, having been appointed to that position in 1897, after the death of the coleopterist, Martin L. Linell, of the Museum staff.

FRUIT INSECT INVESTIGATIONS

A. L. Quaintance, Entomologist in Charge

Oliver I. Snapp, in charge of the peach insect work for the Bureau of Entomology at the Federal and State laboratory at Fort Valley, Ga., reports a large amount of thorough spraying and dusting for the control of the plum curculio in Georgia. The protection from attack by this insect of varieties of peaches thus far harvested has been most excellent.

The varieties of peaches grown and the ripening periods have an important bearing on the amount of damage sustained by the second generation of the curculio. Thus the Hiley, a very important commercial sort, matures as a rule just ahead of egg laying by the second brood, whereas the Georgia Belle and Elberta varieties, ripening later, are oviposited in very freely. Daily jarring records during 1922 show a remarkable decrease in numerical abundance of the curculio as compared with conditions during 1921, amounting to a very important reduction since 1920. Numerous factors are doubtless concerned in this general reduction of the insect in numbers in the Georgia peach belt, but it is believed that one of the most important influences has been the careful attention given by orchardists to remedial work recommended.

According to John B. Gill, at Aberdeen, N. C., a scarabaeid beetle, *Serica trogiformis* Uhler, caused considerable damage to the

FOR PUBLICATION SEE A REVIEW OF THE NEW YORK STATE ARCHIVES
BUTLER COUNTY HISTORICAL SOCIETY FOR THE YEAR 1908

62 607703

2348

1991

038770

100

100

16752 11 11

1000

2-110

70 049738

1. 1912

1970 10 22 1043

1010.1 n 21

200 1541C 054

0125-5

1310

10-1-183708

2000

90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290 300 310 320 330 340 350 360 370 380 390 400 410 420 430 440 450 460 470 480 490 500 510 520 530 540 550 560 570 580 590 600 610 620 630 640 650 660 670 680 690 700 710 720 730 740 750 760 770 780 790 800 810 820 830 840 850 860 870 880 890 900 910 920 930 940 950 960 970 980 990 1000 1010 1020 1030 1040 1050 1060 1070 1080 1090 1100 1110 1120 1130 1140 1150 1160 1170 1180 1190 1200 1210 1220 1230 1240 1250 1260 1270 1280 1290 1300 1310 1320 1330 1340 1350 1360 1370 1380 1390 1400 1410 1420 1430 1440 1450 1460 1470 1480 1490 1500 1510 1520 1530 1540 1550 1560 1570 1580 1590 1600 1610 1620 1630 1640 1650 1660 1670 1680 1690 1700 1710 1720 1730 1740 1750 1760 1770 1780 1790 1800 1810 1820 1830 1840 1850 1860 1870 1880 1890 1900 1910 1920 1930 1940 1950 1960 1970 1980 1990 2000 2010 2020 2030 2040 2050 2060 2070 2080 2090 2100 2110 2120 2130 2140 2150 2160 2170 2180 2190 2200 2210 2220 2230 2240 2250 2260 2270 2280 2290 2300 2310 2320 2330 2340 2350 2360 2370 2380 2390 2400 2410 2420 2430 2440 2450 2460 2470 2480 2490 2500 2510 2520 2530 2540 2550 2560 2570 2580 2590 2600 2610 2620 2630 2640 2650 2660 2670 2680 2690 2700 2710 2720 2730 2740 2750 2760 2770 2780 2790 2800 2810 2820 2830 2840 2850 2860 2870 2880 2890 2900 2910 2920 2930 2940 2950 2960 2970 2980 2990 3000 3010 3020 3030 3040 3050 3060 3070 3080 3090 3100 3110 3120 3130 3140 3150 3160 3170 3180 3190 3200 3210 3220 3230 3240 3250 3260 3270 3280 3290 3300 3310 3320 3330 3340 3350 3360 3370 3380 3390 3400 3410 3420 3430 3440 3450 3460 3470 3480 3490 3500 3510 3520 3530 3540 3550 3560 3570 3580 3590 3600 3610 3620 3630 3640 3650 3660 3670 3680 3690 3700 3710 3720 3730 3740 3750 3760 3770 3780 3790 3800 3810 3820 3830 3840 3850 3860 3870 3880 3890 3900 3910 3920 3930 3940 3950 3960 3970 3980 3990 4000 4010 4020 4030 4040 4050 4060 4070 4080 4090 4100 4110 4120 4130 4140 4150 4160 4170 4180 4190 4200 4210 4220 4230 4240 4250 4260 4270 4280 4290 4300 4310 4320 4330 4340 4350 4360 4370 4380 4390 4400 4410 4420 4430 4440 4450 4460 4470 4480 4490 4500 4510 4520 4530 4540 4550 4560 4570 4580 4590 4600 4610 4620 4630 4640 4650 4660 4670 4680 4690 4700 4710 4720 4730 4740 4750 4760 4770 4780 4790 4800 4810 4820 4830 4840 4850 4860 4870 4880 4890 4900 4910 4920 4930 4940 4950 4960 4970 4980 4990 5000 5010 5020 5030 5040 5050 5060 5070 5080 5090 5100 5110 5120 5130 5140 5150 5160 5170 5180 5190 5200 5210 5220 5230 5240 5250 5260 5270 5280 5290 5300 5310 5320 5330 5340 5350 5360 5370 5380 5390 5400 5410 5420 5430 5440 5450 5460 5470 5480 5490 5500 5510 5520 5530 5540 5550 5560 5570 5580 5590 5600 5610 5620 5630 5640 5650 5660 5670 5680 5690 5700 5710 5720 5730 5740 5750 5760 5770 5780 5790 5800 5810 5820 5830 5840 5850 5860 5870 5880 5890 5900 5910 5920 5930 5940 5950 5960 5970 5980 5990 6000 6010 6020 6030 6040 6050 6060 6070 6080 6090 6100 6110 6120 6130 6140 6150 6160 6170 6180 6190 6200 6210 6220 6230 6240 6250 6260 6270 6280 6290 6300 6310 6320 6330 6340 6350 6360 6370 6380 6390 6400 6410 6420 6430 6440 6450 6460 6470 6480 6490 6500 6510 6520 6530 6540 6550 6560 6570 6580 6590 6600 6610 6620 6630 6640 6650 6660 6670 6680 6690 6700 6710 6720 6730 6740 6750 6760 6770 6780 6790 6800 6810 6820 6830 6840 6850 6860 6870 6880 6890 6900 6910 6920 6930 6940 6950 6960 6970 6980 6990 7000 7010 7020 7030 7040 7050 7060 7070 7080 7090 7100 7110 7120 7130 7140 7150 7160 7170 7180 7190 7200 7210 7220 7230 7240 7250 7260 7270 7280 7290 7300 7310 7320 7330 7340 7350 7360 7370 7380 7390 7400 7410 7420 7430 7440 7450 7460 7470 7480 7490 7500 7510 7520 7530 7540 7550 7560 7570 7580 7590 7600 7610 7620 7630 7640 7650 7660 7670 7680 7690 7700 7710 7720 7730 7740 7750 7760 7770 7780 7790 7800 7810 7820 7830 7840 7850 7860 7870 7880 7890 7900 7910 7920 7930 7940 7950 7960 7970 7980 7990 8000 8010 8020 8030 8040 8050 8060 8070 8080 8090 8100 8110 8120 8130 8140 8150 8160 8170 8180 8190 8200 8210 8220 8230 8240 8250 8260 8270 8280 8290 8300 8310 8320 8330 8340 8350 8360 8370 8380 8390 8400 8410 8420 8430 8440 8450 8

foliage of young peach trees during the early spring. Reports of injury were received from several localities in North Carolina, including Aberdeen, Southern Pines, Pinehurst, and Candor, and at Cheraw, S. C. These beetles were frequently taken in jarring peach trees for the curculio, but the injury to the older trees was not serious. This species is a nocturnal feeder. The beetles were found in great numbers in some young peach orchards and investigations showed that they usually burrow into the soil to a depth of one inch near the crown of the tree.

Ants have been very troublesome on peach trees set out this year on recently cleared woodland in the sand hills of North and South Carolina, and some trees have been badly defoliated by them. One species, which is believed to be Solenopsis geminata but has not yet been authoritatively determined, cuts the foliage and carries the bits of leaves into its nest. This species is without doubt the one that causes most of the injury. The damage by ants is greatly reduced by frequent stirring of the soil by means of orchard cultivators, and for all practical purposes this seems to cope with the situation satisfactorily. Peach orchards set out on old land do not appear to be troubled at all by ants.

Fred E. Brooks, at French Creek, W. Va., reports that late spring frosts did considerable damage in certain places to the crop of walnuts and butternuts in the general locality of Pennsylvania and West Virginia. Of the young nuts that set there has been noted a considerable dropping due to the attacks of various species of Conotrachelus. Some of the members of this group affecting nuts are discussed in Department Bulletin 1066, now in press.

Stanley W. Bromley, of the Massachusetts Agricultural College, has been appointed temporary assistant at the Wallingford, Conn., laboratory and will assist B. A. Porter in the study of the apple maggot, tent caterpillar, etc.

W. D. Whitcomb recently gave a talk on the life history of the codling moth and its control before a meeting of fruit growers at Kettle Falls, Wash.

A. Pederson, gardener and horticultural adviser of the Danish Gardeners' Association, Copenhagen, Denmark, was a recent visitor at the Yakima, Wash., station.

The services of Dr. H. L. Dozier have been secured in connection with the camphor scale work, for which a special appropriation of \$15,000 was made by Congress. He will devote particular attention to biological studies of the insect, and carry out experiments with remedies. His headquarters are at New Orleans, La.

T. F. Catchings, who has been assisting in connection with the Mexican bean beetle investigations at Birmingham, Ala., has been trans-

foliage of the trees
were the
down
beetles
but the
mosses
green
the

on the
like
which
active
the
injury
the
this
not

front
and
of
the
mosses
1966

been
and
mosses

medic
Talia

Gardner
Yakima

with the
was made
studies
headwaters

the
Mexican

ferred to the office of Fruit Insect Investigations and will assist Dr. Dozier in connection with life-history investigations of the camphor scale.

W. E. Upton has been appointed field assistant for a temporary period and will assist in connection with the camphor scale control operations, with headquarters at New Orleans, La.

C. H. Hadley reports that the following men have accepted temporary appointments at the Japanese Beetle Laboratory, Riverton, N.J., for this summer and have reported for duty: Prof. W. A. Price of Purdue University, Dr. Henry Fox of Mercer University, H. H. Pratt, a graduate of Rutgers College, and J. H. Painter, a graduate of the University of Maryland.

Dr. William Moore of the Japanese beetle laboratory has recently returned from a trip to the bean beetle laboratory at Birmingham, Ala., where he was carrying on cooperative experiments with the bean beetle laboratory.

Representative Isaac Bacharach (of New Jersey) recently paid a visit to the Japanese beetle laboratory where he had opportunity to look over the work of the laboratory and obtain a first-hand idea of the Japanese beetle situation in general.

There was received at the Japanese beetle laboratory earlier in the spring what is believed to have been one of the largest shipments of imported parasite material ever brought into this country from abroad. Something over a hundred thousand cocoons of a tachinid known to be parasitic on the Japanese beetle in Japan were sent to the laboratory by C. P. Clausen and J. L. King, who are stationed in Japan and working upon Japanese beetle parasites there. A fairly large proportion of these cocoons were apparently in good condition upon their arrival at the laboratory and emergence has just commenced.

BEE-CULTURE INVESTIGATIONS

E. F. Phillips, Apiculturist in Charge

L. M. Bertholf, a graduate student at Johns Hopkins University, has been appointed to assist in making examinations of adult bees to determine whether the mite causing the Isle of Weight disease is present. A considerable number of samples of adult bees have already been received from all parts of the country. Neither last year nor so far in the work this year have any of these mites been found in bees received from the United States.

The Maryland State Beekeepers' Association will hold a regular summer field meeting at the Bee Culture Laboratory on the afternoon of July 29.

The bill to regulate the importation of adult bees passed the House by unanimous consent on June 5 and has been referred to the Senate Committee on Agriculture and Forestry.

B. Lineburg, a graduate student at Johns Hopkins University, has been appointed for the summer to conduct work on the responses of bees to lights of various wave lengths and intensities.

Samples of honeys from all parts of the United States are being received for examination with reference to the work which is being done on the colors of extracted honeys. So far most of the samples have come from the southern States but with the advancement of the season they are coming in from other points as well. It is expected that during the summer several hundred samples will be obtained and measured in this work.

CEREAL AND FORAGE INSECT INVESTIGATIONS

W. R. Walton, Entomologist in Charge

A. F. Satterthwait, in charge of the Webster Groves, Mo., field station, visited Mississippi during the first two weeks of June, for the purpose of investigating billbug conditions in that State. Prof. R. W. Harned, State entomologist, accompanied Mr. Satterthwait during a portion of his tour.

C. M. Packard, of the Sacramento, Calif., station, has returned to Sacramento after a stay of some months at Bird's Landing, Calif., where he was investigating an outbreak of the Hessian fly.

P. R. Myers of the Carlisle, Pa., station, visited the Washington office on June 12.

On July 1, 1922, the business office of the corn-borer control activities, in charge of L. H. Worthley, will be moved from Abbot Building, Harvard Square, Cambridge, to No. 10 Court Street, Arlington, Mass. The headquarters for the research and regulatory phases of the corn borer work will be housed in the same building after that date.

Field headquarters of the regulatory work in connection with the corn borer work have been established at 1918 Canton Avenue, Toledo, Ohio, and Room 311, Plymouth Building, Cleveland, Ohio.

TRUCK-CROP INSECT INVESTIGATIONS

F. H. Chittenden, Entomologist in Charge

During the past month this office has received a large number of letters from growers with regard to the control of the Mexican bean beetle. It is particularly worthy of note in connection with these that many complaints are being received from localities in which the bean beetle was difficult to find last year, except by close inspection. The injurious range of the pest is plainly being extended to include the eastern half of Tennessee, and reaches to one new point in Kentucky. From the fact that the attention of growers is being attracted to injury by this pest, it is evident that a large section of additional country will be damaged during the present summer.

W. H. White, scientific assistant of the Washington office, recently completed a trip to the eastern shore of Virginia where an outbreak of the potato aphid (Macrosiphum solanifolii) was investigated. At the time of Mr. White's visit, most of the serious damage had been accomplished in some cases, reducing the crop yield one-half, according to estimates of growers. In fields where the insects were abundant just before the potato had blossomed, the young tender shoots had, in many cases, been completely killed. Control by natural enemies and fungous diseases was doing much to reduce the numbers of the aphids. Two successful applications of a three per cent nicotine dust were made to a field at the Olney branch of the Virginia Truck Experiment Station.

Mr. White has also recently visited Baltimore, Md., to investigate an outbreak of the corn earworm on cannery beans. The actual damage to the infested fields was not great, but a factor of material importance to bean growers and canners of that section was the fact that the larvae sometimes enter the pods, where they remain and eventually find their way into canned beans, even under the most careful handling.

C. F. Stahl, scientific assistant of the Riverside, Calif. laboratory, has recently completed a trip through the beet sections of California, Utah, Nevada, Idaho, Washington, and Oregon to investigate injury by the "curly-top" disease, transmitted by the leafhopper Eutettix tenella.

R. E. Campbell, scientific assistant of the Alhambra, Calif., laboratory, attended the meeting of the western branch of the Association of Economic Entomologists at Salt Lake City, Utah.

D. E. Fink, entomological assistant of the Riverton, N. J., laboratory, has been investigating truck-crop pests in the vicinity of Rochester, N. Y.

B. L. Boyden, scientific assistant, in charge of sweet-potato weevil eradication in Florida, has transferred his headquarters from Daytona to Tampa. Eradication headquarters will still be maintained at Macclenny, Fla.

W. H. Merrill, field assistant, has been transferred from Macclenny to Tampa, Fla., to assist Mr. Boyden.

E. G. Smyth, special field agent, is investigating the life history and habits of the Mexican bean beetle in the States of Oaxaca, Morelos, and other points in southern Mexico, with headquarters at Mexico City.

J. E. Graf, entomologist in charge, field control, Mexican bean beetle, is investigating the hibernation and emergence of the bean beetle in the Estancia Valley of New Mexico.

Luther Brown and T. F. Catchings, formerly connected with the Mexican bean beetle laboratory, have recently been transferred to New Orleans, La., in connection with the new camphor scale project.

Guy Fletcher, who was employed during the summer season for the past year as field assistant, Baton Rouge, La., has been temporarily appointed to assist C. E. Smith.

LIBRARY

Mabel Colcord, Librarian

New Books

Frankhauser, Franz. Guide pratique de sylviculture. Ed. 3. 342 p. Lausanne, Librairie Poyet et Cie., 1921.

Hunger, F. W. T. Cocos nucifera. Handboek voor de kernis van den cocospalm in Nederlandsch-Indie... 2 druk. 518 p., 94 plates, 2 maps. Amsterdam, 1920. Beschadigingen, ziekten en plagen van den Cocospalm, p.129-207.

Leefmans, Saloman. Bijdrage tot het vraagstuk der bladrollers van de thee. Batavia, 1921. (Buitenzorg. Instituut voor plantenziekten. Mededeelingen no. 51.)

Lotrionte, Giuseppe. La lotta contra la mosca delle olive col metodo delle capannette (istruzioni pratiche). In Nuovi Annali del Ministerio per l'Agricoltura (Italy), v.2, no.1, p.45-72. March 31, 1922.

Mosely, M. E. The dry-fly fisherman's entomology. Being a supplement to Frederic M. Halford's The dry-fly man's handbook. 109 p., 16 col. plates. London, George Routledge and Sons, limited: New York, E. P. Dutton & Co., 1921.

Poeteren, N. van. Ziekten en beschadigingen van tomaten. 30 p.,
4 plates. (Verslagen en Mededeelingen van den plantenziekten-
kundigen dienst te Wageningen No. 26.)

Schenkling, S. Coleopterorum catalogus pars 73. (Aurivillius,
C. Cerambycidae. Lamiinae I.) 322 p. Berlin, W. Junk, January
15, 1922.

Watson, Malcolm. The prevention of malaria in the Federated Malay
States; a record of twenty years' progress... 2d ed. 381 p.
London, 1921.

